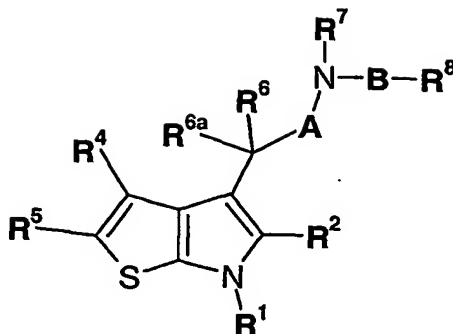


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CLAIMS:

1. A compound of Formula (I),

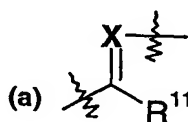


Formula (I)

wherein

A represents a direct bond or optionally substituted C_{1-5} alkylene;

B is a group of Formula (II):



Formula (II);

wherein at position (a) Formula (II) is attached to the nitrogen atom and the group **X** is attached to **R⁸**;

R¹ represents hydrogen; optionally substituted C_{1-8} alkyl; or $(CH_2)_b-R^a$, wherein

R^a represents C_{3-8} cycloalkyl and **b** is zero or an integer from 1 to 6;

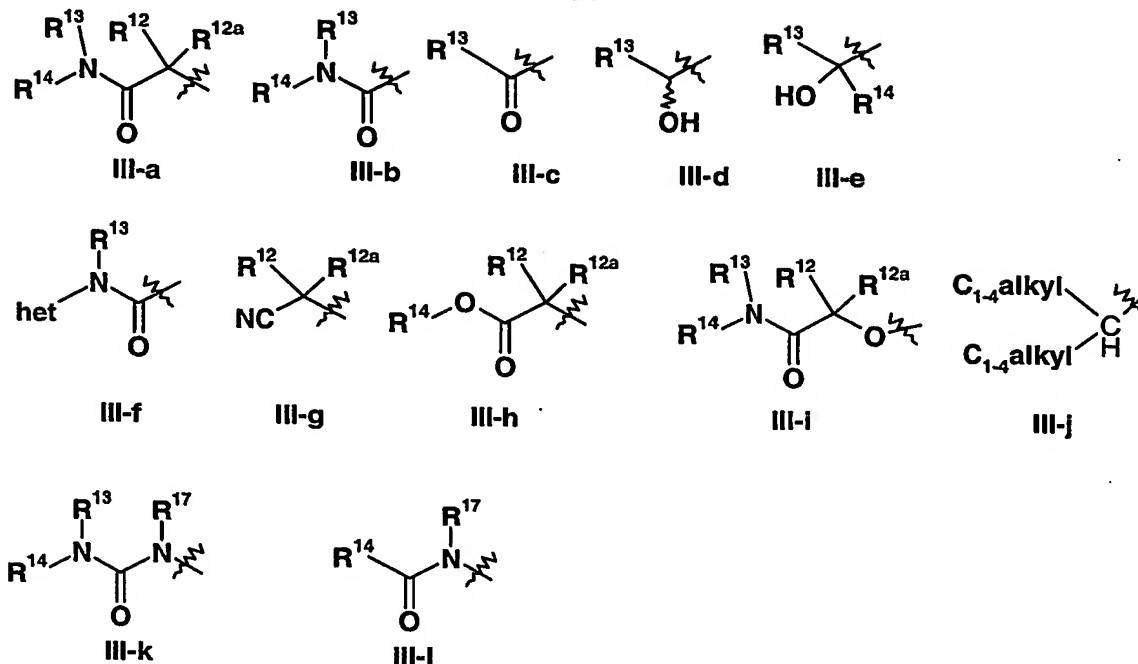
R² represents an optionally substituted mono- or bi-cyclic aromatic ring structure wherein the optional substituents are selected from cyano, NR^3R^{3a} , optionally substituted C_{1-8} alkyl, optionally substituted C_{1-8} alkoxy or halo;

R³ and **R^{3a}** are independently selected from hydrogen; optionally substituted C_{1-8} alkyl and optionally substituted aryl;

R⁴ is hydrogen;

R⁵ is selected from an optionally substituted 3- to 8- membered heterocyclic ring containing from 1 to 4 heteroatoms independently selected from O, N and S; or a group of formula **III-a**; **III-b**; **III-c**; **III-d**; **III-e**; **III-f**; **III-g**; **III-h**; **III-i**; **III-j**; **III-k** or **III-l**;

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wherein **het** represents an optionally substituted 3- to 8- membered heterocyclic ring containing from 1 to 4 heteroatoms independently selected from O, N and S;

R⁶ and **R**^{6a}, are independently selected from hydrogen and optionally substituted

5 **C**₁₋₈alkyl; or **R**⁶ and **R**^{6a} together represent carbonyl;

R⁷ represents hydrogen or optionally substituted **C**₁₋₈alkyl;

or **R**⁶ **A-N-R**⁷ together form an optionally substituted 3- to 8- membered heterocyclic ring containing from 1 to 3 further heteroatoms independently selected from O, N and S, and **R**^{6a} represents hydrogen and optionally substituted **C**₁₋₈alkyl;

10 **X** and **R**⁸ are selected from:

(i) **X** represents N and **R**⁸ is selected from:

cyano, hydrogen, hydroxy, -O-**R**^b, -C(O)-**R**^b, -N**R**^b**R**^c -C(O)O-**R**^b, -CON**R**^b**R**^c or NH-C(O)-**R**^b, where **R**^b and **R**^c are independently selected from hydrogen and **C**₁₋₄alkyl optionally substituted with hydroxy, amino, N-**C**₁₋₄alkylamino, N,N-di-**C**₁₋₄alkylamino, HO-**C**₂₋₄alkyl-NH- or HO-**C**₂₋₄alkyl-N(**C**₁₋₄alkyl)-;

(ii) **X** represents CH and **R**⁸ represents NO₂; and

(iii) =**X-R**⁸ represents =O;

R¹¹ is a group of the formula: N(**R**⁹**R**¹⁰) wherein **R**⁹ represents hydrogen, optionally substituted aryl, an optionally substituted 3- to 10 membered heterocyclic ring or optionally-substituted **C**₁₋₈alkyl and **R**¹⁰ represents hydrogen or optionally substituted

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C₁₋₈alkyl; or

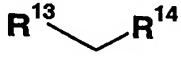
the structure N(R⁹R¹⁰) represents an optionally-substituted 3- to 10 membered heterocyclic ring optionally containing from 1 to 3 further heteroatoms independently selected from O, N and S;

5 R¹² and R^{12a} are independently selected from hydrogen or optionally substituted C₁₋₈alkyl; or R¹² and R^{12a} together with the carbon to which they are attached form an optionally substituted 3 to 7-membered cycloalkyl ring;

R¹³ and R¹⁴ are selected from:

10 (i) R¹³ is selected from hydrogen; optionally substituted C₁₋₈alkyl; optionally substituted aryl; -R^d-Ar, where R^d represents C₁₋₈alkylene and Ar represents optionally substituted aryl; and optionally substituted 3- to 8- membered heterocyclic ring optionally containing from 1 to 3 further heteroatoms independently selected from O, N and S; and R¹⁴ is selected from hydrogen; optionally substituted C₁₋₈alkyl and optionally substituted aryl;

15 (ii) where R⁵ represents a group of formula III-a, III-b, III-i or III-k, then the group NR¹³(-R¹⁴) represents an optionally substituted 3- to 8- membered heterocyclic ring optionally containing from 1 to 3 further heteroatoms independently selected from O, N and S; or

20 (iii) where R⁵ represents structure III-e, then the group  represents an optionally substituted 3- to 8- membered heterocyclic ring optionally containing from 1 to 4 heteroatoms independently selected from O, N and S; R¹⁷ is selected from: hydrogen and C₁₋₄alkyl; or a salt, pro-drug or solvate thereof.

25 2. A compound according to Claim 1 wherein R⁹ represents hydrogen, optionally substituted aryl, an optionally substituted 3- to 10 membered heterocyclic ring or optionally-substituted C₁₋₈alkyl and R¹⁰ represents hydrogen or optionally substituted C₁₋₈alkyl wherein the optional substituents on aryl, the heterocyclic ring and C₁₋₈alkyl are selected from: hydroxy, amino, nitro, cyano, optionally-substituted aryl, optionally substituted 3- to 8- membered heterocyclyl containing from 1 to 4 heteroatoms independently selected from O, N and S, -O-R^b, C(O)NR^bR^c, -NR^bR^c, -NR^cC(O)-R^b, -C(O)NR^bR^c, -NR^cS(O₀₋₂)R^b, -S(O₀₋₂)R^b, wherein R^b and R^c are as defined in Claim 1.

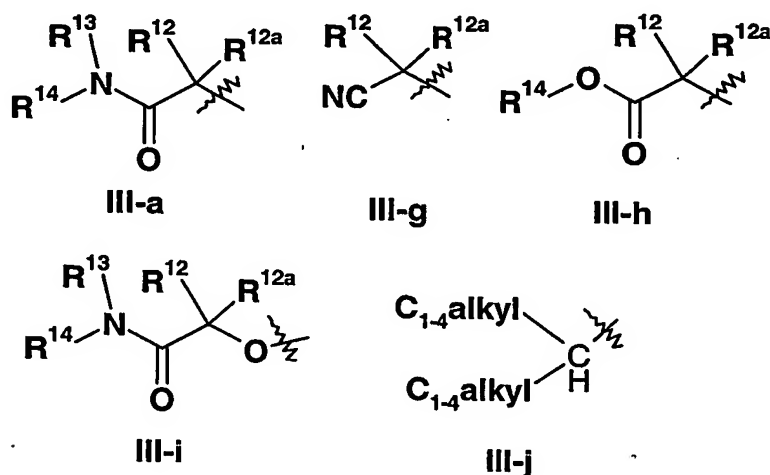
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3. A compound according to Claim 2 wherein R^9 is a C_{1-6} alkyl group substituted by pyridyl, thienyl, piperidiny, imidazolyl, triazolyl, thiazolyl, pyrrolidinyl, piperazinyl, morpholinyl, imidazolinyl, benztriazolyl, benzimidazolyl, pyrimidinyl, pyrazinyl, pyridazinyl, oxazolyl, furanyl, pyrrolyl, 1,3-dioxolanyl or 2-azetiny, each of which is optionally substituted as defined in Claim 2.
4. A compound according to Claim 1 wherein the structure $N(R^9R^{10})$ represents an optionally-substituted 3- to 10 membered heterocyclic ring optionally containing from 1 to 3 further heteroatoms independently selected from O, N and S.
5. A compound according to Claim 4 wherein the 3- to 10 membered heterocyclic ring is optionally substituted by one of more groups selected from R^{15} wherein R^{15} represents the group $R^{15a}-Z-$ wherein R^{15a} is selected from optionally substituted aryl, an optionally substituted 3- to 10 membered heterocyclic ring or optionally substituted C_{1-4} alkyl and Z is selected from a direct bond, $-(CH_2)_{s1}-$, $-(CH_2)_{s1}-O-(CH_2)_{s2}-$, $-(CH_2)_{s1}-C(O)-(CH_2)_{s2}-$, $-(CH_2)_{s1}-S(O_n)-(CH_2)_{s2}-$, $-(CH_2)_{s1}-N(R^{18})-(CH_2)_{s2}-$, $-(CH_2)_{s1}-C(O)N(R^{18})-(CH_2)_{s2}-$, $-(CH_2)_{s1}-N(R^{18})C(O)-(CH_2)_{s2}-$, $-(CH_2)_{s1}-N(R^{18})C(O)N(R^{18})-(CH_2)_{s2}-$, $-(CH_2)_{s1}-OC(O)-(CH_2)_{s2}-$, $-(CH_2)_{s1}-C(O)O-(CH_2)_{s2}-$, $-(CH_2)_{s1}-N(R^{18})C(O)O-(CH_2)_{s2}-$, $-(CH_2)_{s1}-OC(O)N(R^{18})-(CH_2)_{s2}-$, $-(CH_2)_{s1}-OS(O_n)-(CH_2)_{s2}-$, or $-(CH_2)_{s1}-S(O_n)-O-(CH_2)_{s2}-$, $-(CH_2)_{s1}-S(O)_2N(R^{18})-(CH_2)_{s2}-$, $-(CH_2)_{s1}-N(R^{18})S(O)_2-(CH_2)_{s2}-$; wherein the $-(CH_2)_{s1}-$ and $-(CH_2)_{s2}-$ groups are independently optionally substituted by hydroxy or C_{1-4} alkyl and $s1$ and $s2$ are independently an integer from 0 to 2, wherein $s1+s2$ is less than or equal to 2 and R^{18} is selected from hydrogen or C_{1-4} alkyl;
- wherein the optional substituents on aryl, a heterocyclic ring or C_{1-4} alkyl are selected from: hydroxy, amino, nitro, cyano, optionally-substituted aryl, optionally substituted 3- to 8- membered heterocyclyl containing from 1 to 4 heteroatoms independently selected from O, N and S, $-O-R^g$, $-C(O)-R^g$, $-C(O)NR^gR^h$, $-NR^gR^h$, $-NR^hC(O)-R^g$, $-C(O)NR^gR^h$, $-NR^hS(O_{0-2})R^g$, $-S(O_{0-2})R^g$, wherein R^g

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and R^8 are independently selected from: heterocyclyl, hydrogen and C_{1-4} alkyl optionally substituted with hydroxy, amino, N - C_{1-4} alkylamino, N,N -di- C_{1-4} alkylamino, HO - C_{2-4} alkyl-NH- or HO - C_{2-4} alkyl-N(C_{1-4} alkyl)-.

- 5 6. A compound according to Claim 5, wherein Z is selected from a direct bond or carbonyl.
7. A compound according to any one of the preceding claims wherein R^5 is selected from a group of formula III-a, III-g, III-h, III-i or III-j:



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8. A compound according to any one of the preceding claims wherein:
- (a) X represents N and R^8 represents cyano or $-C(O)O-R^b$; wherein R^b is as defined in Claim 1, or
- 15 (b) X represents N and R^8 represents hydrogen.
9. A compound according to any one of the preceding claims wherein R^2 is selected from an optionally substituted monocyclic aromatic ring structure wherein the optional substituents are selected from cyano, NR^eR^f , optionally substituted C_{1-8} alkyl, optionally
- 20 substituted C_{1-8} alkoxy or halo wherein R^e and R^f are independently selected from hydrogen, C_{1-6} alkyl or aryl.
10. A compound according to any one of the preceding claims wherein R^1 is hydrogen.

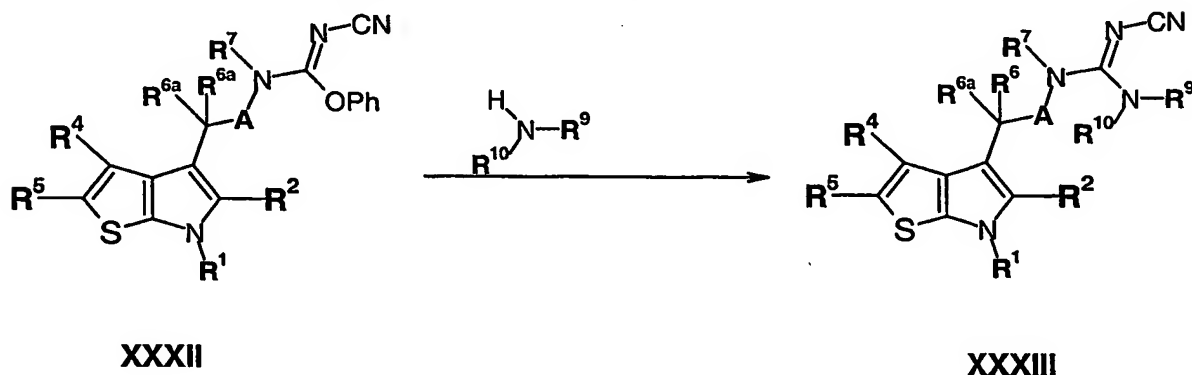
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11. A compound selected from:
- 2-(1,1-dimethyl-2-oxo-2-azabicyclo[2.2.1]heptan-7-ylethyl)-
4-[1S-methyl-2-(N'-isopropoxycarbonyl-3-pyrid-4-yl-pyrrolidin-1-ylcarboximida
mido) ethyl]-5-(3,5-dimethylphenyl)--6*H*-thieno[2,3-*b*]pyrrole;
- 5 2-(1,1-dimethyl-2-oxo-2-azabicyclo[2.2.1]heptan-7-ylethyl)-
4-[2-(N'-isopropoxycarbonyl-3-pyrid-4-yl-pyrrolidin-1-ylcarboximidamido)
ethyl]-5-(3,5-dimethylphenyl)--6*H*-thieno[2,3-*b*]pyrrole;
- 10 2-(2-pyrrolidin-1-yl-1,1-dimethyl-2-oxoethyl)-
4-[1S-methyl-2-(N'-isopropoxycarbonyl-3-pyrid-4-yl-pyrrolidin-1-ylcarboximida
mido) ethyl]-5-(3,5-dimethylphenyl)--6*H*-thieno[2,3-*b*]pyrrole;
- 15 2-(1,1-dimethyl-2-oxo-2-azabicyclo[2.2.1]heptan-7-ylethyl)-
4-[1S-methyl-2-(N'-isopropoxycarbonyl-4-tetrahydropyran-4-yl-
piperidin-1-ylcarboximidamido)ethyl]-5-(3,5-dimethylphenyl)--6*H*-thieno[2,3-
b]pyrrole;
- 20 2-(1,1-dimethyl-2-oxo-2-azabicyclo[2.2.1]heptan-7-ylethyl)-
4-[1S-methyl-2-(3-pyrid-4-yl-pyrrolidin-1-ylcarbonyl)ethyl]-5-(3,5-
dimethylphenyl)--6*H*-thieno[2,3-*b*]pyrrole;
- 25 2-(1,1-dimethyl-2-oxo-2-azabicyclo[2.2.1]heptan-7-ylethyl)-
4-[1S-methyl-2-(N'-ethoxycarbonyl-3-pyrid-4-yl-pyrrolidin-1-yl
carboximidamido) ethyl]-5-(3,5-dimethylphenyl)--6*H*-thieno[2,3-*b*]pyrrole;
or a salt, pro-drug or solvate thereof.
12. A compound, or salt, pro-drug or solvate thereof, according to any one of Claims
1 to 11 for use as a medicament.
13. A pharmaceutical formulation comprising a compound, or salt, pro-drug or solvate
thereof, according to any one of Claims 1 to 11 and a pharmaceutically acceptable
diluent or carrier.
14. Use of a compound, or salt, pro-drug or solvate thereof, according to any one of Claims
1 to 11, in the manufacture of a medicament for administration to a patient, for
therapeutically treating and/or preventing a sex hormone related condition in the patient.

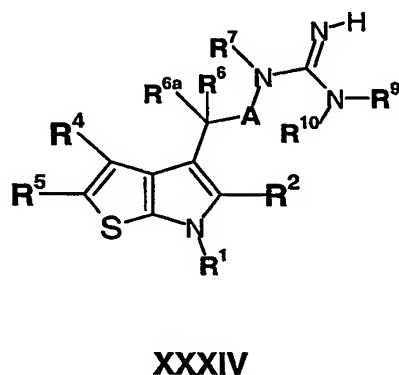
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15. A process of producing a compound, or salt, pro-drug or solvate thereof, according to any one of Claims 1 to 11, wherein the process comprises a reaction step selected from any one of steps (a) to (f):-

(a) Reaction of a compound of formula **XXXII** as follows

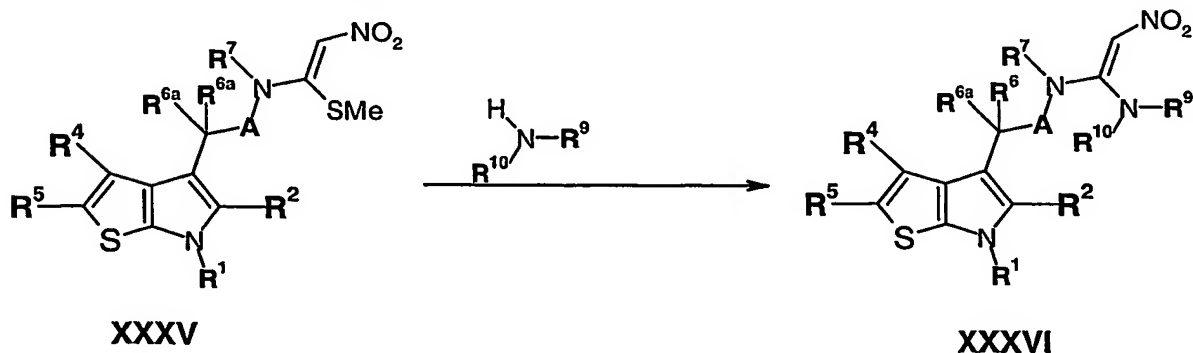


(b) Cleavage of the cyano group of a compound of formula **XXXIII** in the presence of acid to produce a compound of formula **XXXIV**



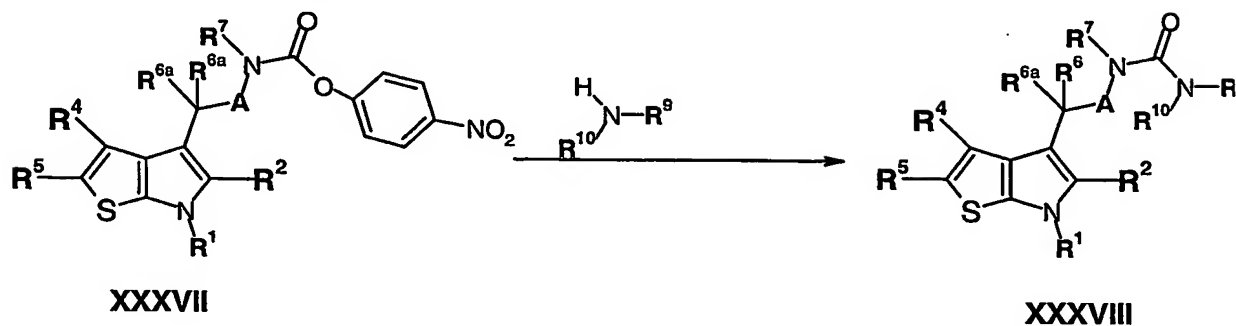
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(c) Reaction of a compound of formula **XXXV** as follows

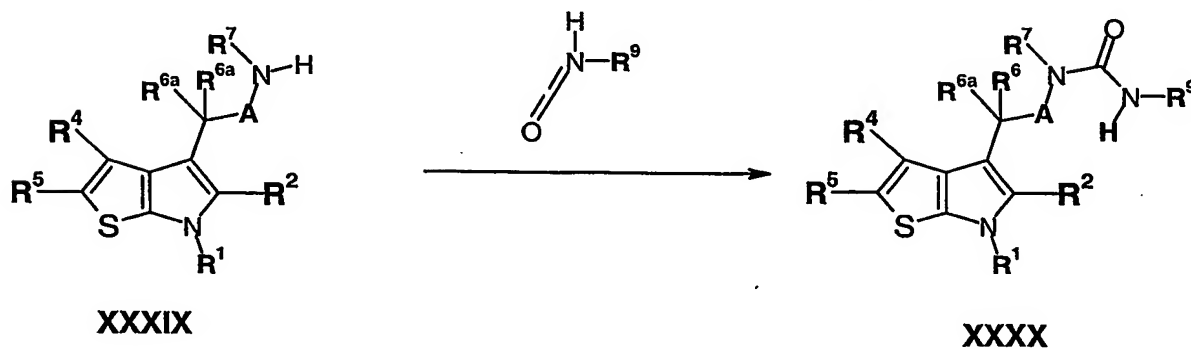


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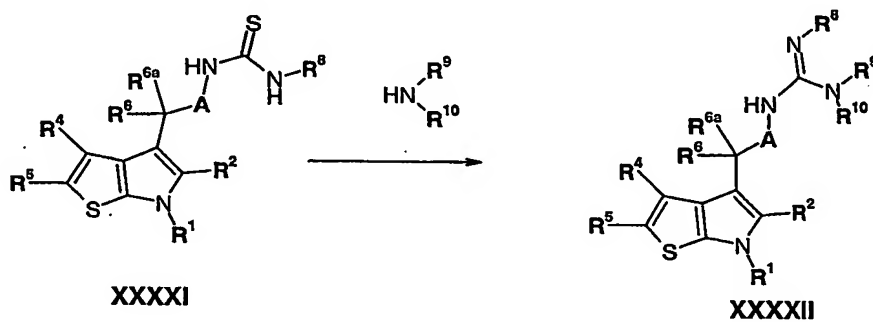
(d) Reaction of a compound of formula XXXVII as follows



(e) Reaction of a compound of formula XXXIX as follows



(f) to form a compound wherein X is nitrogen and Reaction of a compound of formula XXXXI as follows



and thereafter if necessary:

- i) converting a compound of the Formula (I) into another compound of the Formula (I);
- ii) removing any protecting groups;
- iii) forming a salt, pro-drug or solvate.